Title (en)

GAS TURBINE NOZZLE HAVING SUPERIOR THERMAL FATIGUE RESISTANCE

Publication

EP 0074603 B1 19860514 (EN)

Application

EP 82108220 A 19820907

Priority

JP 14222581 A 19810911

Abstract (en)

[origin: JPS5845345A] PURPOSE:To obtain a nozzle for a gas turbine with superior thermal fatigue resistance by suing a casting consisting of specified percentages of C, Cr, Co, W, Mo and Ni and contg. eutectic carbide and secondary carbide in the austenite matrix. CONSTITUTION:A nozzle for a gas turbine is formed with a casting consisting of, by weight, 0.1-1% C, 20-35% Cr, 16-35% Co, 5-15% at least one of W and Mo, and the balance Ni or further contg. at least 1 kind of element selected from 0.02-1% Ti and Nb, 0.05-2% Ta, Hf and Zr, and 0.01-1% Y and Al. The casting contains eutectic carbide and secondary carbide in the austenite matrix. The obtd. nozzle has superior thermal fatigue (thermal impact) resistance and a long life.

IPC 1-7

C22C 30/00; F01D 5/28

IPC 8 full level

F01D 9/02 (2006.01); **C22C 19/05** (2006.01); **C22C 30/00** (2006.01); **F01D 5/28** (2006.01)

CPC (source: EP US)

C22C 19/053 (2013.01 - EP US); **C22C 30/00** (2013.01 - EP US); **F01D 5/28** (2013.01 - EP US)

Cited by

CN111534717A; EP0365716A1; GB2198746A; GB2198746B

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EP 0074603 A1 19830323; **EP 0074603 B1 19860514**; JP S5845345 A 19830316; JP S6128007 B2 19860628; US 4465530 A 19840814

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